



Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
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Tel (613) 632-5200
Fax 613 632-5246

RBE703A95-0520-01
Job Sheet R191279



Part No: RBE703A95-0520-01

Job Qty: 5 pcs

Part Name: Engine And Hydraulic Drain Tube



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/26/19

Job Tracking No: ECN19-561

Due Date: 3/5/19

Created By: Linda Lacelle

Type: Rework

Description:

Note: URF 19-600, URF 19-561 DWG RBE703A95-0520-01 Rev 4 IPP Rev A 18.01.23 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	5 pcs	3/5/19		1.00	0.33	Small Fab - 1		
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
110	QC 5	5 pcs	3/5/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-1 - Stock - B4B	5 pcs	3/5/19		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		

Add sleeve per
ECN19-561

				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - FG	5 pcs	3/5/19	0.00 0.00	QC 21 - FG - 21
					QC 21 - FG - 70
					QC 21 - SA - 53
Part Op 100 - 1-Assemble -9 coupling with -7 hose. 2-Bag and tag. Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel Descriptions: into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). 110 - (QC5- Inspect part completeness to step on W/O) 130 - (Identify as per dwg & Stock Location: _____), Identify and Stock 140 - (QC21- Final Inspection - Work Order Release)					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
M304TR0.375W.065	304 Round Tube .375 X .065W	.4150 ft (.083 ea)	100-Small Fab - 1		
RBE703A95-0520-01	Engine And Hydraulic Drain Tube	30 pcs (6 ea)	100-Small Fab - 1	S132633	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Small Fab - 1	M304TR0.375W.065	0	57	0	
	RBE703A95-0520-01	30	12	0	
Part Specifications					
Specifications could not be found.					

Vanessa Morel

Tuesday, February 26, 2019 8:02 AM

Linda Lacelle; Michael Lee; Steven Drouin; Mychel Beauregard; Daniel Paquette

Jean-Luc Menard

RE: more ECN reworks and URF's

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Ext.302

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ace.com

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February 25, 2019 2:53 PM

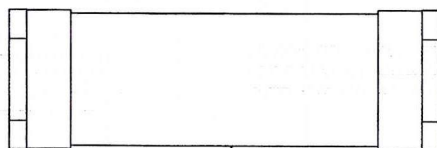
mlee1@dartaero.com>; Steven Drouin <sdrouin@dartaero.com>; Mychel Beauregard <mbeauregard@dartaero.com>; Vanessa Morel
<vmorel@dartaero.com>; Daniel Paquette <dpaquette@dartaero.com>
ard <jmenard@dartaero.com>
V reworks and URF's

ie please give me some direction on what needs to be reworked on each of these ? I have these piling up and don't want something non-
out the door. I am alone doing all of these, and would like to get these done asap...

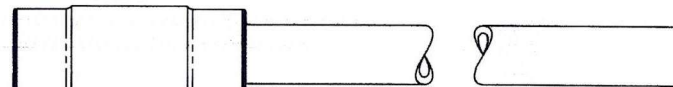
: needs to be reworked? Drwg does not state what has changed – RB H4713 – 5 in stk Sleeve need to be added into the hose assy

: needs to be reworked? Drwg does not state what has changed – is it jst the McMaster part? RBE703A95-0520-01 – 5 in QRTN Sleeve need to
hose assy

ITEM #	QTY	PART #	PART TITLE
-17	1	RBE703A95-0520-01-17	ENGINE & HYDRAULIC DRAIN TUBE QUILL ASSEMBLY
-19	1	RBE703A95-0520-01-19	ENGINE & HYDRAULIC DRAIN TUBE HOSE ASSEMBLY



-17



-19

RBE703A95-0520-01 ENGINE & HYDRAULIC DRAIN TUBE

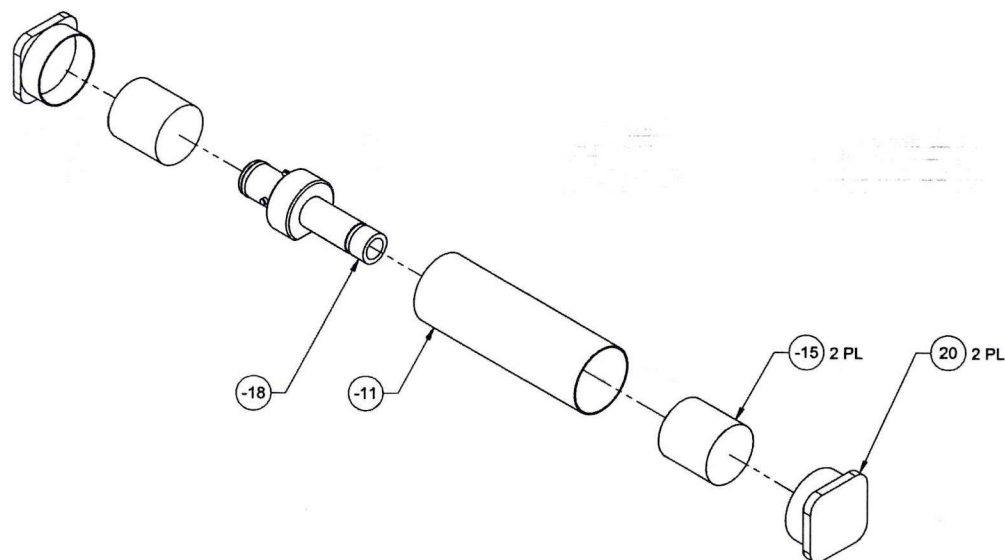
8

NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) PLACE ITEM -19 COILED INTO A TIGHT FITTING SEALED PLASTIC BAG WITH ITEM -17

SEE PREVIOUS REVISION FOR MORE INFORMATION		REV. J	
UPDATED DRAWING TEMPLATE		19-561 KPT	
ADDED ITEMS -17, -18, -19, AND 23			
ITEM 22 WAS McMaster-CARR #91585A030 IS McMaster#93600A252 OR EQUIV.			
-1 DIM WAS $\phi 0.0983/0.0979$ IS $\phi 0.0984 \pm 0.0008$. REMOVED FLATS FOR ENGRAVING S/N, T/N, AND "MADE IN USA". ADDED NEW FLAT FOR ENGRAVING T/N			
REV.	DESCRIPTION	ECN #	BY
DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT	TOOL PART # RBE703A95-0520-01	
CHECKED	MBB	REV. J SHEET 1 OF 7	
MFG. APPR.	DP	TITLE ENGINE & HYDRAULIC DRAIN TUBE	
APPROVED	WP	SCALE NTS	
DATE 2/25/2019		COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

ITEM #	QTY	PART #	PART TITLE
-11	1	RBE703A95-0520-01-11	TUBE
-15	2	RBE703A95-0520-01-15	FOAM
-18	1	RBE703A95-0520-01-18	QUILL ASSEMBLY
20	2	McMaster#2044T67 OR EQUIV.	VINYL END CAP FOR 1.09" ID. SHIPPING TUBE



RBE703A95-0520-01-17 ENGINE & HYDRAULIC DRAIN TUBE QUILL ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
2) HEAT TREAT: N/A
3) FINISH: N/A

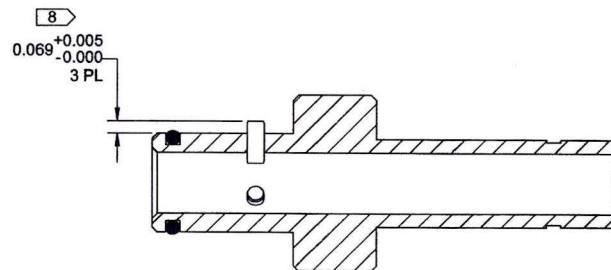
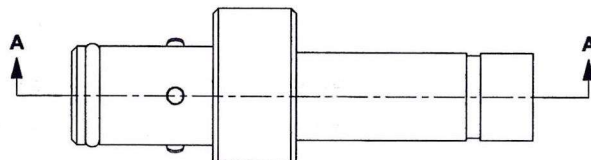
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"

5) UNITS: INCHES UNLESS OTHERWISE NOTED

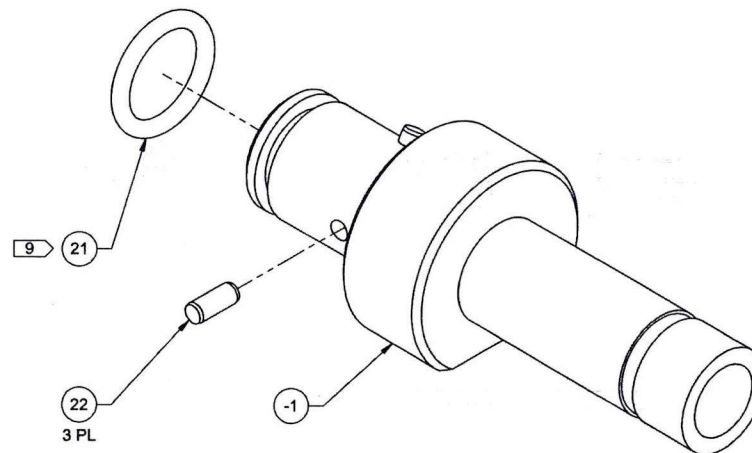
- 6) IDENTIFICATION: N/A
7) ASSEMBLE AS SHOWN

DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MBB	TOOL PART #	REV. J
MFG. APPR.	DP	RBE703A95-0520-01	SHEET 2 OF 7
APPROVED	<i>VP</i>	TITLE	SCALE
DATE	2/25/2019	ENGINE & HYDRAULIC DRAIN TUBE	NTS
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ITEM #	QTY	PART #	PART TITLE
-1	1	RBE703A95-0520-01-1	QUILL
21	1	McMaster#9263K519 OR EQUIV.	VITON O-RING 11 mm ID. X 15 mm OD. X 2 mm THK.
22	3	McMaster#93600A252 OR EQUIV.	316 SS DOWEL PIN 2.5 mm DIA. X 6 mm LG.



SECTION A-A

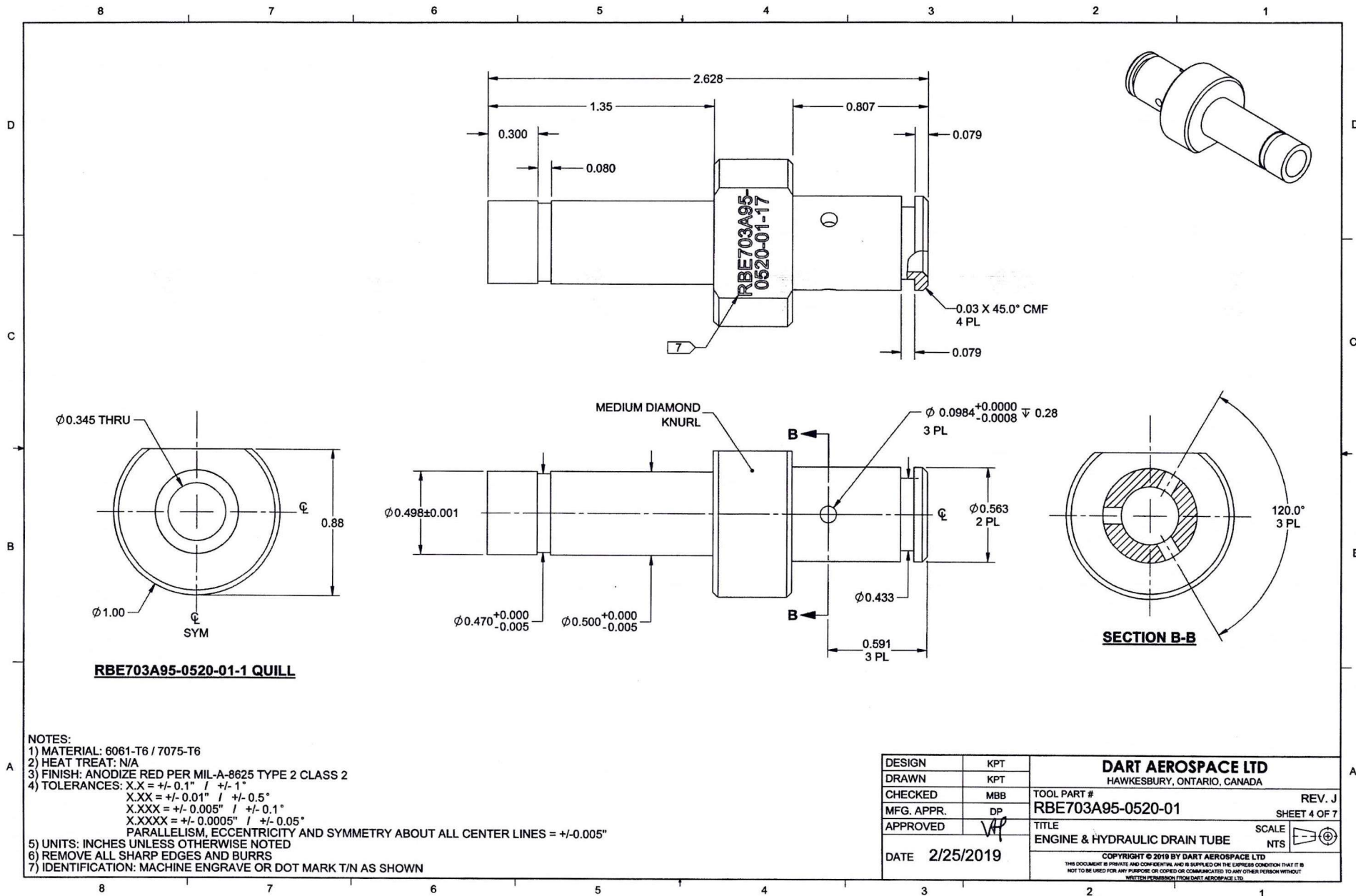


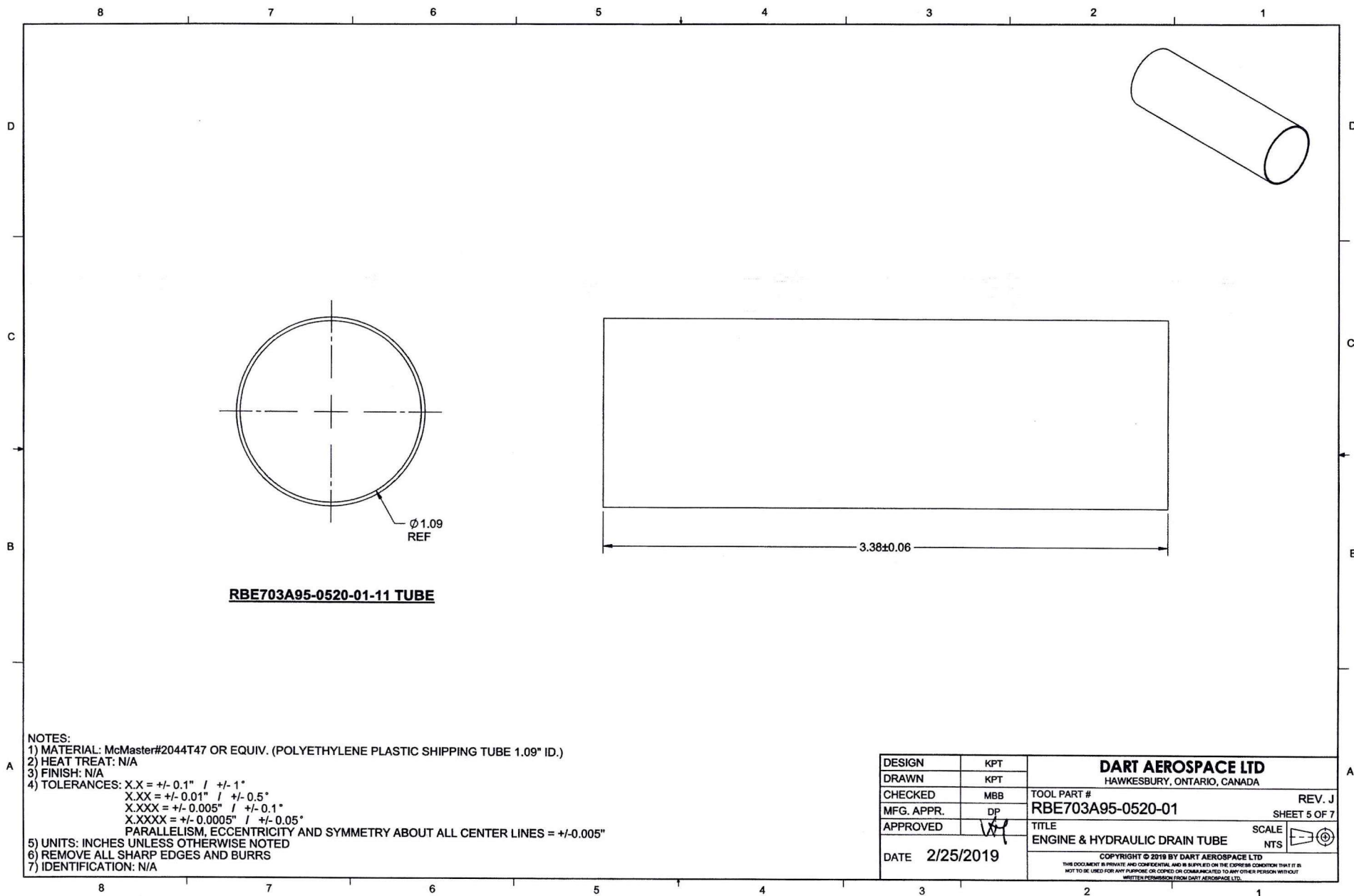
RBE703A95-0520-01-18 QUILL ASSEMBLY

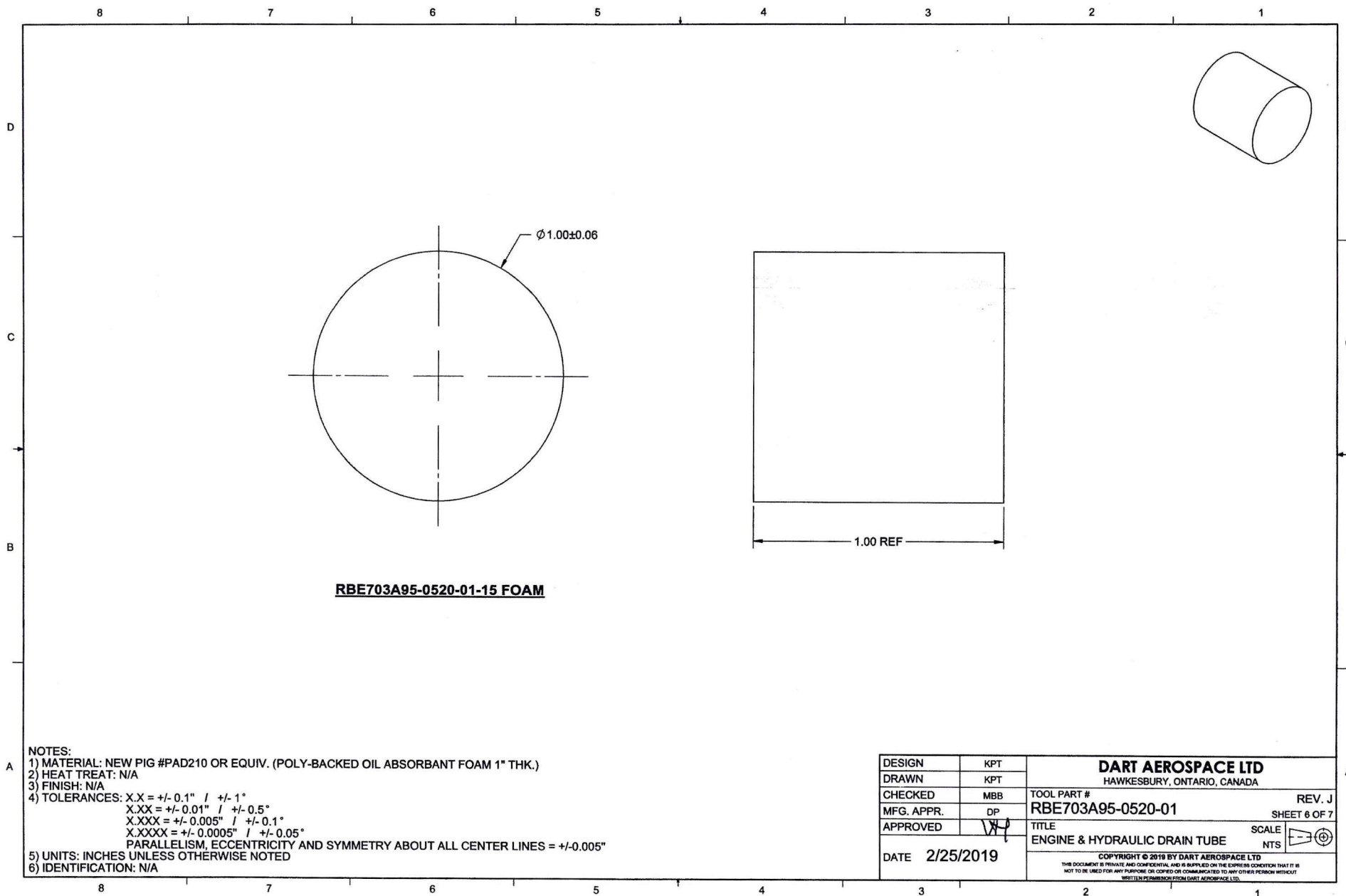
NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1"
X.XX = +/- 0.01" / +/- 0.5"
X.XXX = +/- 0.005" / +/- 0.1"
X.XXXX = +/- 0.0005" / +/- 0.05"
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) APPLY RETAINING COMPOUND LOCTITE 620 OR EQUIVALENT ON MATING SURFACES THEN PRESS FIT ITEM 22 WITH ITEM -1, AND REMOVE EXCESS
- 9) APPLY MOLYKOTE 55 OR EQUIVALENT ON ITEM 21 THEN ASSEMBLE WITH ITEM -1 AND REMOVE EXCESS

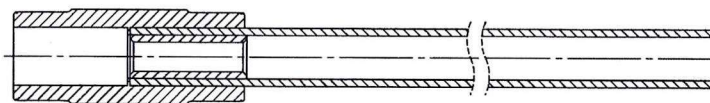
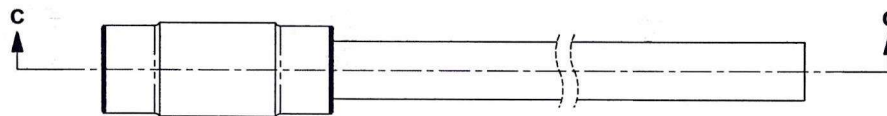
DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MBB	TOOL PART #	REV. J
MFG. APPR.	DP	RBE703A95-0520-01	SHEET 3 OF 7
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DATE	2/25/2019	ENGINE & HYDRAULIC DRAIN TUBE	NTS
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ITEM #	QTY	PART #	PART TITLE
23	1	DTSP10001	SLEEVE
24	1	KURI-TEC#K010-0608 OR EQUIV.	CLEAR PVC TUBING 1/2" OD. X 3/8" ID. X 72" LG.
25	1	McMaster#51495K116 OR EQUIV.	NICKEL-PLATED BRASS PUSH-TO-CONNECT 1/2" OD. TUBE FITTING



SECTION C-C

RBE703A95-0520-01-19 ENGINE & HYDRAULIC DRAIN TUBE HOSE ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) INSTALL ITEM 23 INTO ONE END OF ITEM 24 UNTIL FLUSH

DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MBB	TOOL PART #	REV. J
MFG. APPR.	DP	RBE703A95-0520-01	SHEET 7 OF 7
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DATE 2/25/2019		ENGINE & HYDRAULIC DRAIN TUBE	NTS
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ENGINEERING CHANGE NOTICE
DART AEROSPACE LTD

Date: 19.02.25	Job No.: RB18-EUROCOPTER	ADR Yes/No: N	ADR Date:	ECN #: 19- 561
Product No.: DART TOOLING EUROCOPTER		Created By: VM	Approved By: <i>[Signature]</i>	
Product Name: ENGINE & HYDRAULIC DRAIN TUBE		Checked By: <i>[Signature]</i>		

Reason for Change:
PRODUCTION ISSUE

Documents Released:

RBE703A95-0520-01 REV J

IF APPLICABLE: NCR: _____ PAR: _____ CAR: _____ CIR: _____ URF: 19-561

PAPERWORK UPDATE ☐

PARTS MUST COMPLY ☒

PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance / Customer Support Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Airbus	N			
3	Notify Leonardo	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/Drawings/Item ID's Under Review (URF)	N			
6	Update Master Document List (MDL)	N			
7	Update Document Record (DR)	N			
8	Update Product Compatibility Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10		N			

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	Y	MD		<i>md 19.02.25</i>
12	Update Product Specification Files (Bluefiles)	N			
13	Update Approved/Preliminary Dwg PDF Files	Y	MD		<i>md 19.02.25</i>
14	Update Product Development Summary (STC applications)	N			
15	Update QSI 021 (TC/FAA STC) and/or STC Approval List	N			
16	Create/Update Parts / STC Database	Y	MD		<i>md 19.02.25</i>
17	Update / Verify Authorized Release Certificate Database	Y	N	<i>md</i>	<i>md 19.02.25</i>
18	Create / Update Change Record Form / Item Card Database	Y	MD		<i>md 19.02.25</i>
19	Create / Update Packaging Process Plan (PPP)	N			
20	Red Decals required on Packaging Process Plan (PPP)?	N			
21	Update Controlled Supplier Documents (Qpulse) Database	N			
22	Update Grey Project Binder / Electronic Project Folder	N			
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	N			
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

Description / Action:

STOCK CAN BE REWORK PER REV J
RELEASE RBE703A95-0520-01 REV J DRAWING
PLACE DRAWING RBE703A95-0520-01 REV 4 IN SUPERCEED FOLDER
CLOSE URF19-561

ECN Verified & Complete: _____ Date: _____